

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Application Review

Issue Date:

Region: Winston-Salem Regional Office
County: Wilkes
NC Facility ID: 9700122
Inspector's Name: Robert Barker
Date of Last Inspection: 12/1/2016
Compliance Code: 3 / Compliance - inspection

Facility Data Applicant (Facility's Name): Interflex Group Inc. - Carolina Plant Facility Address: Interflex Group Inc. - Carolina Plant 3200 West NC Highway 268 Wilkesboro, NC 28697 SIC: 2759 / Commercial Printing, Nec NAICS: 323111 / Commercial Gravure Printing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V				Permit Applicability (this application only) SIP: 02D 0515, 02D 0516, 02D 0521, 02D 1806, 02Q 0711 NSPS: Subpart IIII NESHAP: Subpart ZZZZ, Subpart KK (area source) PSD: N/A PSD Avoidance: Yes NC Toxics: N/A 112(r): N/A Other: N/A			
Contact Data				Application Data			
Facility Contact Megan Sumrall Ink Room Manager (336) 921-3505 3200 West NC Highway 268 Wilkesboro, NC 28697	Authorized Contact Rich Voisinet Plant Manager (336) 921-3505 3200 West NC Highway 268 Wilkesboro, NC 28697	Technical Contact Beverly Kershner Sr. Environmental Specialist (215) 699-4800 1350 Welsh Road, Suite 200 North Wales, PA 19454	Application Number: 9700122.14A; 9700122.16B; and 9700122.16C Date Received: 08/19/2014, 05/02/2016 and 08/02/2016 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 04613/T24 Existing Permit Issue Date: 05/16/2016 Existing Permit Expiration Date: 01/31/2017				
Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2014	---	0.2100	43.22	0.1700	0.0100	2.37	1.80 [Glycol Ethers, Unlisted - Spec]
2013	---	0.3000	93.03	0.2500	0.0100	1.60	1.02 [Glycol Ethers, Unlisted - Spec]
2012	---	0.2800	75.60	0.2400	0.0100	1.49	0.9137 [Glycol Ethers, Unlisted - Spec]
2011	---	0.2100	35.76	0.1700	0.0100	1.56	1.08 [Glycol Ethers, Unlisted - Spec]
2010	---	0.2300	39.21	0.1900	0.0100	1.92	1.31 [Glycol Ethers, Unlisted - Spec]
Review Engineer: Urva Patel Review Engineer's Signature: _____ Date: _____					Comments / Recommendations: Issue 04613/T25 Permit Issue Date: _____ Permit Expiration Date: _____		

1. Purpose of Application:

This Permit Review is a consolidation of three different applications. (**Application No. 9700122.16B, 9700122.16C and 9700122.14A**)

Application ID No. 9700122.16B

Currently, Interflex Group Inc. – Carolina Plant (IFG) holds Title V Permit No. 04613T24 with an expiration date of January 31, 2017. The Title V renewal application (**Application No. 9700122.16B**) was received on May 02, 2016, or at least nine months prior to the expiration date of the Title V permit. Therefore, Air Permit No. 04613T24 shall not expire until the renewal permit has been issued or denied, per the application shield in General Condition 3.K. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

Application ID No. 9700122.14A

The application is submitted for second step (Part II) of two-step significant modification for the installation and operation of the Adwest Regenerative Thermal Oxidizer (**ID No. CD-02**) and removal of current Catalytic Oxidizer (**ID No. CD-01**) in accordance with 15A NCAC 02Q .0501(c)(2). This second step application takes these modifications to public notice and EPA review in order to extend the permit shield as described in General Condition R to this equipment. No modifications to the permitted equipment as originally submitted in the first step application are needed as part of this second step.

A regulatory review for these sources was completed for the issuance of permit **04613T23** indicating expected compliance with all applicable emission limits. Please see Judy Lee's **October 4, 2013** permit review, which is provided as Attachment 1 to this document.

Application ID No. 9700122.16C

The application is submitted for second step (Part II) of two-step significant modification for the installation and operation of the Anguil Regenerative Thermal Oxidizer (**ID No. CD-03**) and Press 16 (Formerly known as Press 13 or ES-13, current **ID No. ES-16**); and removal of Press Parts Washer (**ID No. IES-8**) in accordance with 15A NCAC 02Q .0501(c)(2). This second step application takes these modifications to public notice and EPA review in order to extend the permit shield as described in General Condition R to this equipment. No modifications to the permitted equipment as originally submitted in the first step application are needed as part of this second step.

A regulatory review for **ID No. CD-03** was completed for the issuance of permit **04613T24** indicating expected compliance with all applicable emission limits. A regulatory review for **ID No. ES-16 (Formerly known as Press 13 or ES-13)** was completed for the issuance of permit **04613T20** indicating expected compliance with all applicable emission limits. Please see Heather Sands' **May 16, 2016** permit review and Rahul Thaker's **September 3, 2009** permit review, which are provided as Attachments 2 and 3, respectively, to this document.

2. Facility Description:

The facility prints plastic wrapping for the food industry, particularly chicken and turkey products.

3. History / Background / Application Chronology:

Permit History Since Last Permit Renewal

February 6, 2012	Title V Air Permit renewed. Air Permit No. 04613T22 issued with a permit expiration date of January 31, 2017.
October 4, 2013	Title V Air Permit No. 04613T23 issued. Under this "Part I" modification, RTO (ID No. CD-02) was added in the permit.
May 16, 2016	Title V Air Permit No. 04613T24 issued. Under this "Part I" modification, RTO (ID No. CD-03) and designation change of Press 13 (ID No. ES-13) to Press 16 (ID No. ES-16) were included.

Application Chronology

August 19, 2014	Received application for "Part II" modification (Application No. 9700122.14A).
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August 19, 2014	Sent acknowledgement letter indicating that Part II modification permit application was complete.
May 2, 2016	Received application for renewal of Title V permit (Application No. 9700122.16B).
May 2, 2016	Sent acknowledgement letter indicating that the permit renewal application was complete.
June 6, 2016	Permit applications (9700122.14A and 9700122.16B) reassigned to Urva Patel.
August 2, 2016	Received application for “Part II” Significant modification (Application No. 9700122.16C).
August 2, 2016	Sent acknowledgement letter indicating that Part II modification permit application were complete.
October 13, 2016	Sent to Manager Review
October 20, 2016	Received comment from Mr. Mark Cuilla
October 20, 2016	Sent query to Ms. Shannon Vogel (Compliance Section) regarding stack test report review of ES-16
October 20, 2016	Sent query to Mr. Samir Parekh (Technical Services) regarding CAM condition verification.
October 21, 2016	Received comments from Mr. Samir Parekh (Technical Services)
October 21, 2016	Received comments from Ms. Shannon Vogel (Compliance Section)
November 30, 2016	Sent query to Ms. Shannon Vogel (Compliance Section) regarding pressure range on RTO
December 3, 2016	Sent to Manager Review
December 7, 2016	Discussion with Ms. Betty Gatano regarding removal of pressure range condition (2.1 A.4.j)
December 12, 2016	Received comments from Manager (Ms. Betty Gatano)
January 12, 2017	After having discussion with Ms. Betty Gatano and Ms. Shannon Vogel, Pressure range condition (2.1 A.4.j) was removed.” This condition is not needed as it does not satisfy PTE verification by 100%. It is excessive” as per conversation with Ms. Shannon Vogel.
January 3, 2017	As per an email from Ms. Beverly Kershner, “Tanks 1,2 and 3 are the solvent tanks currently in use at the site. The additional tanks listed in the insignificant activities table – Tanks 4, 5, 6 and 7 – have not yet been constructed.”
January 20, 2017	As per regional comment on draft permit, 40kW emergency generator was not listed in the permit. Therefore, I requested facility to provide more information on 40 kW diesel-fired emergency generator to include in permit. For detailed information, see <i>Section 5. Compliance Status</i> in this Permit Review.
February 8, 2017	As per email from Ms. Beverly Kershner, 40 kW diesel-fired emergency generator (I-Gen) would qualify as insignificant source.

4. Summary of Changes to the Existing Permit (Permit No. 04613T25):

Page No.	Section	Description of Changes
Cover Letter	N/A	Update cover letter for minor modification as per 02D .0515 procedures; application, permit numbers, dates, PSD increment statement and Chief name.
Permit Cover	N/A	Insert new issuance and complete application date and application number.
--	Insignificant Activities List	<ul style="list-style-type: none"> Removed “ID No. IES-8, press parts washer” Added “ID No.: I-Gen, Diesel-fired emergency generator (40 kW)”
3	Section 1	<ul style="list-style-type: none"> Added “MACT Subpart KK” in the Equipment Table – Emission Source ID No. column.
4	2.1, Emission source Table	<ul style="list-style-type: none"> Removed “02Q. 0317 (MACT Avoidance)” from applicable regulations and added “02D .1111”
6	2.1 A.4.d	<ul style="list-style-type: none"> Combined 2.1 A.4.d and e; Renumbered the remainder of the section accordingly.
6	2.1 A.4 Monitoring/ Recordkeeping	<ul style="list-style-type: none"> Combined 2.1 A.4.f and g; Renumbered the remainder of the section to be consistent with numerical order
7	2.1 A.4.f	<ul style="list-style-type: none"> Changed reference from “2.1 A.4.e.iii and A.4.f.iii” to “2.1 A.4.e.v.”

Page No.	Section	Description of Changes
7-8	2.1 A.4.j	<ul style="list-style-type: none"> Removed exhaust duct pressure requirements with specific pressure range as it is not needed. Renumbered condition to be consistent with numerical order
8	2.1 A.5	<ul style="list-style-type: none"> Condition removed as the facility began operation of the control device (ID No. CD-03).
9	2.2 A Emission Sources Table	<ul style="list-style-type: none"> Removed "02Q. 0317 (MACT Avoidance)" from applicable regulations and added "02D .1111."
10	2.2 A.5	<ul style="list-style-type: none"> Removed "15 NCAC 02Q .0317 Avoidance Conditions"

5. Compliance Status:

DAQ has reviewed the compliance status of this facility. During the most recent inspection conducted on December 1, 2016, Robert Barker of the Winston-Salem Regional Office indicated that the facility appeared to be in compliance with all applicable requirements.

During the compliance inspection on December 1, 2016, Mr. Robert Barker observed that the facility had a 40 kW emergency generator (diesel-fired) on-site. The engine was manufactured in 2014 and the generator was manufactured in 2015. The engine and generator were installed in 2015. It is therefore subject to NSPS Subpart IIII. The emergency generator has a non-resettable hour meter with a reading of 102.4 hours. The facility contact stated that the generator is normally tested weekly for 20 min. The fuel certification sheet for the diesel fuel shows that it meets the 15 ppm requirement. The engine is part of the EPA engine family EJXLI04.5141 and conforms to the USAEPA regulations.

Five-year Compliance History:

- On March 8, 2016, a Notice of Violation (NOV) was issued for missing submission of emission testing of Press (**ID No. ES-16**) within 180 days of the Initial start-up. This is a violation of Condition 2.1 A.4.d.ii of Air Quality Permit 04613T23. The facility subsequently submitted emission test report of Press (**ID No. ES-16**) on August 2, 2016.
- On July 12, 2016, a Notice of Deficiency (NOD) was issued for failure to submit an Air Quality Emission Inventory certification page and supporting calculations as required by Air Quality Permit No. 04613T24. This document was due on June 30, 2016 and the Winston-Salem Regional Office (WSRO) received this documentation on July 8, 2016.

6. Regulatory Review

The facility is currently subject to the following regulations:

- 15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes
- 15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources
- 15A NCAC 2D .0521, Control of Visible Emissions
- 15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions
- 15A NCAC 2Q .0317, Avoidance Conditions (for 15A NCAC 2D .0530, Prevention of Significant Deterioration and 15A NCAC 2D .1111, Maximum Achievable Control Technology)
- 15A NCAC 2Q .0711, Emission Rates Requiring a Permit

Unless specifically noted, a detailed discussion of the permit conditions is not included in this review as the applicability status has not changed. The permit conditions have been modified to reflect the most current language, where necessary. The facility is required to be in continued compliance.

7. NSPS, NESHAP/MACT, NSR/PSD, 112(r), CAM

NSPS

This facility is subject to New Source Performance Standards (NSPS), 40 CFR 60.

- 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines: Subpart IIII is applicable to the facility's 40 kW diesel-fired emergency generator (**ID No. I-Gen**). The potential emissions associated with the emergency generator (**ID No. I-Gen**) are included in the table below. The potential emissions were calculated using the NC DEQ emissions spreadsheet for internal combustion (small diesel-fired engines).

Air Pollutants	Emergency Generator Diesel-fired (40 kW) Potential Emissions, Tons per year
PM	0.03
PM ₁₀	0.03
PM _{2.5}	0.03
SO ₂	0.02
NO _x	0.42
CO	0.09
VOC	0.03
Total HAPs	12.7 lb/yr
Hours in operation	500 hours per calendar year

It is determined to be an insignificant activity due to size, use, and amount of emissions of the source under 15A NCAC 02Q .0503(8). An insignificant activity means any activity

"...whose emissions potential emission of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide before air pollution control devices, i.e., potential uncontrolled emissions, are each no more than five tons per year and whose potential emissions of hazardous air pollutants before air pollution control devices, are each below 1000 pounds per year."

With the uncontrolled emissions of HAPs from the proposed emission source are less than 1,000 pounds per year and criteria pollutants emissions are less than five tons per year as shown in the calculations above, the small internal combustion engine (**ID No. I-Gen**) meets the criteria for insignificant activities under 15A NCAC 02Q .0503(8). No permit is required for installation and operation of the equipment.

While the full permit stipulation will not be included in the permit since this is an insignificant piece of equipment. The facility shall still be required to comply with all applicable provisions including the notification, testing, reporting, recordkeeping, and monitoring requirements. Compliance is expected and will be verified during facility inspections.

NESHAP/MACT

This facility is subject to the following National Emission Standards for Hazardous Air Pollutants, 40 CFR 63. This permit renewal does not change this status.

- The Permittee is subject to 40 CFR 63, Subpart KK "National Emission Standards for the Printing and Publishing Industry" for **Emission Source ID Nos. ES-08, ES-14, ES-15, and ES-16**, however the Permittee has chosen to commit to and meets the criteria of paragraphs (a)(2)(i) and (ii) of 40 CFR 63.820 for purposes of establishing the facility to be an area source of HAP with respect to 40 CFR 63 Subpart KK. Therefore, IFG is considered Minor for Title III. Area sources are not subject to any of the MACT provisions, except recordkeeping as specified in 40 CFR 63.829(d) and 63.830(b)(1).
- The permittee is subject to 40 CFR 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). This standard for area sources applies to Interflex's diesel-fired emergency generator (**ID No. I-Gen**). According to 40 CFR §63.6590(c)(1), the diesel-fired generator meets the requirements of 40 CFR 63 Subpart ZZZZ by complying with requirements under 40 CFR Part 60 Subpart IIII for compression ignition engines. Compliance is expected and will be verified during facility inspections.

In order to remain classified as a minor source of HAPS, emissions of HAPs are limited to less than 10 tons per year of any individual HAP and to less than 25 tons per year of any combination of HAPs. The current permit includes monitoring, recordkeeping, and reporting requirements.

NSR/PSD

The facility is located in Wilkes County, which is currently designated as attainment or unclassified for all PSD regulated pollutants. This facility is major for PSD as it has potential emissions of VOC above 250 tons per year. The permit includes two PSD avoidance conditions for VOC emissions:

Emission Source(s)	PSD Avoidance Condition for VOC
flexographic presses (ID No. ES-16 and ES-15)	Less than 250 tons per year of VOC emissions
flexographic presses (ID No. ES-08 and ES-14)	Less than 250 tons per year of VOC emissions

The permit includes requirements to calculate VOC emissions based on material usage and submit semi-annual reports of calculations (monthly and yearly). This permit renewal does not affect this status.

112(r)

This facility is **NOT** subject to the requirements of the Chemical Accident Release Prevention Program, Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above thresholds in the Rule. This permit renewal does not change this status.

Compliance assurance Monitoring (CAM)

Pursuant to 40 CFR 64.2, the provisions of the Compliance Assurance Monitoring (CAM) rule are applicable to emission units that meet all of the following criteria:

Criteria #1: The unit is subject to an emission limitation AND uses a control device to achieve compliance with the limit;

Criteria #2: The unit has pre-control potential emissions that are equal to or greater than 100% of the amount (in tpy) required for a source to be classified as a major source (i.e., 100 tpy of any criteria pollutant or 10 tpy of any HAP, North Carolina); and,

Criteria #3: The unit is not exempt under 40 CFR 64.2(b).

Emission Unit	Criteria #1: Does the Source Use a Control Device?	Criteria #2: Pre-control PTE \geq 100% of major source thresholds?	Criteria #3: Exempt Under 40 CFR 64.2(b)?	CAM Source?
ES-08	VOC; CD-2	Yes (VOC)	VOC: Yes	VOC: No
ES-14	VOC; CD-2	Yes (VOC)	VOC: Yes	VOC: No
ES-15	VOC; CD-2	Yes (VOC)	VOC: Yes	VOC: No
ES-16	VOC; CD-3	Yes (VOC)	VOC: Yes	VOC: No

The emission units (ES-08, ES-14, ES-15 and ES-16) are subject to VOC emission standard of 15A NCAC 02Q .0317 (PSD Avoidance limit < 250 tons/year). This emission standard is CAM exempt under §64.2(b)(v) – *An emission cap that meets the requirements specified in §70.4(b)(12)*. Therefore, CAM is not required for these units.

8. Facility-Wide Air Toxics:

The Permittee is subject to 15A NCAC 02Q .0711. This regulation lists the toxic permitting emission rates (TPERs) for each regulated TAP. The Permittee has made a demonstration that emissions of the listed pollutants are each below their respective TPERs. A permit modification is required prior to exceeding any of these limits. The current permit requires that the Permittee maintain records indicating continued compliance with these emission rates. This permit renewal does not affect this status.

9. Facility Emission Review:

There are no changes in potential emissions under this permit renewal. Actual emissions for 2010 through 2014 are reported in the header of this permit review.

10. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 02Q .0521 above. Virginia, Tennessee, Forsyth County, and Mecklenburg County are within 50 miles of the facility and will be notified accordingly.

11. Other Regulatory Considerations:

- A Professional Engineers Seal is not required with this application.
- A zoning consistency determination is not required for this application.
- A 30-day public notice and 45-day EPA review is required for this application.

12. Recommendations/Conclusion:

DAQ recommends the issuance of Air Permit No. 04613T25 to Interflex Group Inc. - Carolina Plant.